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Leading Diverse Teams in the Department of Defense

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Three topics were discussed in combination in this paper: Teams, Team Leadership, and Diversity. The question that drove this report was "How should teams consisting of diverse individuals be led?" To this end, a review of the literature was carried out. In addition, a pilot study was conducted to examine the effects of personality diversity (as defined by the Five Factor Model of personality) on learning teams from the Equal Opportunity Advisor 98-2 class at the Defense Equal Opportunity Management Institute (DEOMI). Results of the literature review led to the conclusion that a new paradigm might be explored for managing diversity within organizations and within teams. Results of the pilot study confirmed the importance of personality characteristics as an element of diversity. Suggestions were made for practical actions to be taken on the basis of present knowledge and for research on as yet unanswered questions.

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Introduction

The purpose of this report is to explore the nexus of a number of important issues for the Department of Defense (DoD). These issues are teams, diversity, and team leadership. This paper is intended to stimulate thought on leading diverse teams in DoD by encouraging the reader to consider carefully the definition of teams, diversity, and team leadership, and to consider personality as an important addition to the diversity construct. The study discussed in the last part of the report—albeit preliminary—represents a way of improving diversity training.

"Team" Defined

It is important to start with a definition of "team." There are several that the authors have examined. According to Morgan, Glickman, Woodard, Blaiwes, and Salas (1986), a team consists of two or more individuals interacting interdependently and adaptively to achieve a specified, shared, and valued objective. Other team researchers emphasize the assignment of specific roles to individuals comprising the "team" (Dyer, 1984) and the importance of formal and rigid structure for the roles of each member of the "team." Yanushefski (1995) points out that one way of understanding the definition of "team" involves an examination of the distinction between group and team. In other words, one should address the question, "What makes a work group a team?" In addressing this, Salas et al. (1992) suggest that a team consists of a distinguishable set of two or more people who interact dynamically, interdependently, and adaptively toward a common and valued goal, objective, or mission, and who each have been assigned specific roles or functions to perform. Key in this definition (which clearly resembles the previous definitions cited) is the emphasis on interdependence, coordination, and structure in role assignment. If a group of workers lack these latter characteristics, one might argue that it is not a team.

McGrath, Berdahl, and Arrow (1995) take a different approach to defining "team." For them, the basic collective of workers within an organization is the **work group**. In their theory, a work group is a dynamic system, integrated by people, purposes, and tools, which become the group's members, projects, and technology, respectively. For McGrath et al., every work group must continuously be concerned with at least three functions:

> *(a) a production function, by which it makes a contribution to its embedding system (e.g., a larger organization) in exchange for that system's support of the group and its members;*
>
> *(b) a member support function, by which it makes contributions to its constituent members in exchange for their contributions to the group's activities; and*
>
> *(c) a group well-being function, by which the group maintains itself as an integral and effective system* (p. 18).

According to McGrath et al. (1995), each work group possesses three constituent elements: the members, the set of projects to be accomplished, and the tools the group uses to accomplish its assigned tasks. McGrath et al. describe three types of work groups, which are distinct from one another on the basis of primacy of the constituent elements. For example, if members and their knowledge, skills, abilities, and other characteristics are primary and the tools

are secondary, then the work group is a team. If the tasks to be accomplished by the group are primary and the members are secondary, then the work group is a task force. Finally, if the tools are primary and the tasks are secondary, then the work group is referred to as a crew. This line of reasoning places "team" as one of several types of work groups but does not imply that a work group is a lesser sort of collective than a team (as is often the case in discussions of the difference between teams and work groups).

For DoD, the concept of work group as presented by McGrath et al. (1995) applies in all three variations. There exists the "team" type of work group. An example might be the work group, which constitutes a general operational unit. Individuals are selected for this work group based on a set of knowledge, skills, and abilities required to work within the operational unit. Work group members, once selected, are trained in the intricacies of the operational unit's mission.

There also exists the "task force" type of work group. Task forces are transitory in nature because they are formed for the specific purpose of dealing with a task (problem) at hand. There are countless examples of task forces in the military whose missions range from the rather mundane goals of solving a parking problem in a space-starved base to developing a plan for logistic support for a particular combat mission.

The "crew" type of work group is driven in a sense by the technology designed to address the needs of special classes of projects. Many DoD work groups fall in this "crew" category. For example, some of the advanced weapon systems such as the Stealth fighter jets are designed for specific purposes (projects). These weapon systems call for a work group whose skills match the technological requirements of the system. Another example of a crew is the work group that pilots and runs the Landing Craft Air Cushion (LCAC) vessel in the Navy. In this unusual vessel, work groups are formed based on a match between the technological requirements of the vessel, the "project" for which the vessel is designed, and the profile of knowledge, skills, and abilities that the members possess.

Team Performance Defined

Team performance can be described simply as the work to be accomplished by the team. This statement is deceptively simple because of the unit of analysis problem that any serious team researcher must confront. If a team is a unit, then the apparently appropriate level of analysis to take in defining team performance is the team per se. This means that the team, per se, has an outcome or goal. In professional sports, the team performance may be the dichotomously described outcome of the game—a win or a loss. One might argue that this approach to conceptualizing performance is appropriate in, for example, tactical teams comprising the military. However, it is rare that there is a clear winner or loser in a tactical team skirmish. Games and sports involving teams seem to be the easiest type of task for defining team performance as the outcome of the task.

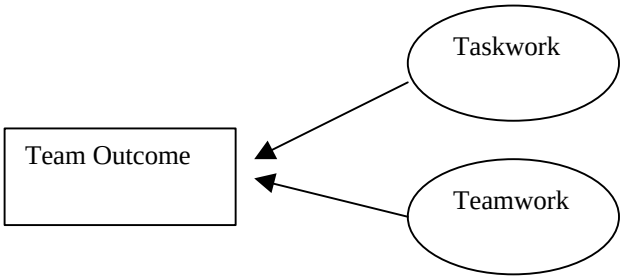
So, if the outcome of the team's efforts is inadequate for assessing its performance, then what other options are there? One line of reasoning presented by Morgan, Glickman, Woodard,

Blaiwes, and Salas (1986) and developed by McIntyre and Salas (1995) is that team performance can be conceptualized by two components: (1) taskwork and (2) teamwork. Taskwork refers to the operations-related activities performed by team members. Teamwork refers to the "processes that strengthen the functional interactions, relationships, cooperation, communication, and coordination of team members" (McIntyre & Salas, 1995, p. 15). In a sense, one can think of the bottom line of team performance as the ultimate outcome—much like the ultimate criterion discussed in criterion theory. As an ultimate outcome, it is at best distal and at worst inaccessible in practical terms for most operational teams. A necessary set of outcomes leading to the ultimate distal criterion of team performance is taskwork. A necessary set of processes to accomplish taskwork is teamwork.

Teamwork vs. Taskwork

Taskwork refers to the activities carried out by the team members. On a football team, taskwork might be described as blocking, running routes, passing, catching, and kicking. Sports analysts often speak of the "passing game," or the "running game," or the "blocking" of the team. Note that the expressions imply that it is the team that performs these task functions and not individuals. McIntyre and Salas (1995) imply in their

Figure 1. Task Work and Team Work Affect Team Outcome



discussion of team performance that the technical aspects of a team task carried out solely by individual team members are taskwork components.

Teamwork refers to the behaviors in which at least some of the team members engage in an interdependent manner. Designers of the team task (such as the tasks carried out by cockpit crews, or surgical teams) can prescribe teamwork. On the other hand, in most real world team tasks, the designer cannot pre-design every possible interdependent set of behaviors. Therefore, much of what is referred to as teamwork is emergent rather than prescribed or pre-planned. In their research on naval tactical teams, McIntyre and Salas (1995) identified a number of essential teamwork behaviors. These teamwork behaviors refer to the definition of team espoused by Morgan et al. (1986) presented above. The following teamwork behaviors were identified as essential:

1. Effective teamwork derives in part from team members' monitoring one another during the team task, that is, keeping track of one another's success and failure.

2. Effective teamwork derives in part from team members' providing feedback to one another and accepting such feedback.

3. Effective teamwork derives in part from team members' engaging in "closed-loop" communication. This type of communication pattern is characterized by the initiator of the communique sending the message and the receiver of the message clearly indicating the message was received as intended.

4. Effective teamwork derives in part from team members' willingness and proclivity to back-up one another in times of need.

5. Effective teamwork derives in part from the collective viewing itself as a team whose success depends on their coordinated interaction.

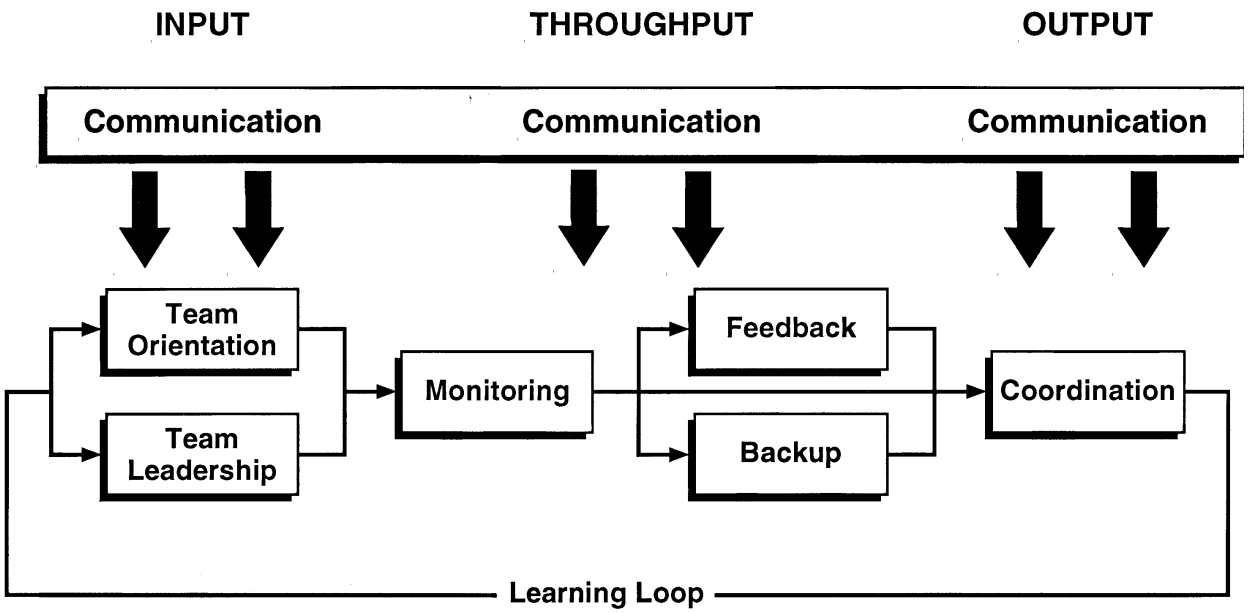
6. Effective teamwork derives in part from the collective fostering within-group interdependence.

7. Team leaders influence the effectiveness of the team by bringing with them a certain level of expertise of the task, serving as models of teamwork, providing feedback to their team members, adapting their leader style to the style of the team members, and by respecting their team members.

Based on these principles discussed by McIntyre and Salas (1995), Dickinson and McIntyre (1997) developed a teamwork process model that attempts to describe the flow of processes in part implied by the principles above. Their model is presented in Figure 2.

Figure 2.

Teamwork Process Model
Developed by
Dickinson and McIntyre (1997)



This model indicates that team leadership and team orientation are the conditions that drive monitoring, feedback, and back-up within the team, which in turn leads to coordination and final team performance. All of these teamwork processes are "embedded" in (or manifest themselves through) the communication channels and links between team members. As was indicated above, the Dickinson-McIntyre team process model is largely based on early work carried out by McIntyre and Salas (1995). Therefore, the components are similarly defined:

Team Orientation refers to the attitudes that team members have toward one another and the team task. It reflects acceptance of team norms, level of group cohesiveness, and importance of team membership.

Team Leadership involves providing direction, structure, and support for other team members. It does not necessarily refer to a single individual with formal authority over others. Several team members can show team leadership.

Communication involves the exchange of information between two or more team members in the prescribed manner and by using proper terminology. Often the purpose of communication is to clarify or acknowledge the receipt of information.

Monitoring refers to observing the activities and performance of other team members. It implies that team members are individually competent and that they may subsequently provide feedback and back-up behavior.

Feedback involves the giving, seeking, and receiving of information among team members. Giving feedback refers to providing information regarding other members' performance. Seeking feedback refers to requesting input or guidance regarding performance. Receiving feedback refers to accepting positive and negative information regarding performance.

Back-up behavior involves assisting the performance of other team members. This implies that members have an understanding of other members' tasks. It also implies that team members are willing and able to provide and seek assistance when needed.

Coordination refers to team members executing their activities in a timely and integrated manner. It implies that the performance of some team members influences the performance of other team members. This may involve an exchange of information that subsequently influences another member's performance.

Performance concerns the accomplishment of the activities and tasks required of the team. This team performance occurs with a consideration of the goals and expectations of team members, the supervisor, and larger organization.

If the reader accepts that these teamwork components are essential requirements of team performance, then what is the implication for diversity? It seems to us that the answer is as follows: The components of teamwork are largely emotionally and motivationally determined. In order for a team member to engage successfully in any of these processes, he or she must be free to work with others in an open and fluid way. Traditional prejudices or discomfort associated with cultural differences—also emotionally and motivationally determined—can and do interfere with a person's effectiveness on any of the components. Furthermore, personality characteristics such as those represented in the Five Factor Model (FFM) of personality add a fruitful dimension to determinants of these teamwork process components. For example, the factor of Agreeableness dictates the levels of competition versus cooperation experienced and exhibited by an individual, and this certainly influences teamwork. For reasons such as this, the authors believe personality may provide a better way of describing the critical, elemental, individual differences that affect the successful interaction of the teamwork processes.

Diversity Defined

One of the most common themes in the diversity literature is a discussion of what the term means. Originally, it was conceived as a way of communicating information on the variation of race, sex, religion, and national origin (RSRNO) characteristics among workers within an organization. However, as researchers worked with the term, either in an effort to find its deeper meaning or as a way of developing interventions dealing with the problems of variation on these characteristics, it became clear that diversity could refer to qualities associated with or attributed to the RSRNO characteristics. It did not take long before diversity became something that was simply valued rather than managed. The "valuing diversity" movement led to further implicit (unstated) refinements of the term which may have led to an increase in ambiguity and confusion regarding the term. This apparently harsh conclusion refers to the lack of clarity of the diversity

construct, which necessarily has led to miscommunication and misspent efforts toward organizational improvement.

Larkey (1996) lays out a cogent basis for understanding diversity, which implicitly acknowledges the role of individual differences. She begins with the assumption that the underlying concern of the diversity discussion is culture. She posits that diversity refers to perceptible characteristics associated with sets of values, beliefs, and attitudes. These values, beliefs, and attitudes reflect a worker's cultural status. In other words, certain cultures share values, beliefs, and attitudes and the outward signs of the culture to which a worker belongs are the RSRNO characteristics. Larkey goes on to present a two-faceted definition of diversity.

> *For purposes of understanding current theory, diversity is defined as (a) differences in worldviews or subjective culture, resulting in potential behaviors* [that may have oral] *differences among cultural groups, …and (b) differences in identity among group members in relation to other groups* (p. 465).

This definition implies a number of things. First, certain cultures and worldviews lead to certain behaviors that may be different from behaviors associated with other worldviews and cultures. Second, individual workers identify with these worldviews and cultures such that their behaviors (particularly those unique to the worldviews and culture) are emotionally charged as **their own**. The emotional element of these behaviors, in turn, implies that focusing on, referencing, criticizing, or commenting on them by other work group members could be inferred as a denigration of the culture that drives them. This can be illustrated by considering teenagers as having their own culture or worldview. The adult who criticizes or even comments on some of their choices in apparel (e.g., dyed hair, baggy trousers, body piercing, tattoos, etc.) creates a chasm between them and the culture that is difficult to cross once created.

In their elaboration of work groups, McGrath et al. (1995) lay the groundwork for the effect of diversity on work groups. These authors take a similar but slightly broader view of diversity than is common among "valuing diversity advocates" and other authorities on the topic. They point out that a work group's composition can be relatively homogeneous or heterogeneous on more than just demographic characteristics. They go on to describe the following classes of characteristics on which group members may show heterogeneity:

1. *Demographic attributes (DEM) that are socially meaningful in the society in which the organization is embedded (e.g., age, race, ethnicity, gender, sexual orientation, physical status, religion, and education).*

2. *Task-related knowledge, skills, and abilities (KSA).*

3. *Values, beliefs, and attitudes (VBA).*

4. *Personality and cognitive and behavioral styles (PCB).*

5. *Status in the work group's embedding organization (ORG; e.g., organizational*

rank, occupational specialty, departmental affiliation, and tenure; p. 23.

A comparison of the Larkey definition of diversity and the implicit definition by McGrath and his colleagues points to one fundamental difference. In the Larkey perspective—which characterizes the approach by most serious researchers in the field—culture is at the heart of diversity issue. Differences in RSRNO characteristics are essentially reflective of cultural differences that lead to different behaviors. Furthermore, many cultural differences historically have been the subject of prejudice in society. That is to say, certain racial, ethnic, sex, religion, and national origin characteristics have been the target of hatred or disrespect within society. Hatred and disrespect were the reasons why discrimination based on RSRNO characteristics was forbidden in legislation like the Civil Rights Act of 1964.

Somewhat paradoxically, the birth of the diversity idea came as a result of the insight that the cultural background that a worker from a particular RSRNO class brings with him or her involves behaviors to be valued even though they may be different from the others in the work group. The McGrath et al. perspective indicates that culture is only one of the individual difference characteristics that an individual worker brings to the work group. Ultimately, however, McGrath et al. embraced an "integrative multicultural approach" to explain how demographic diversity in work groups leads to differences in member behavior, group interaction, and task performance. This approach relates back to Larkey's underlying assumptions in the sense that it discusses demographic attributes as implying diverse cultural identities. These cultural identities reflect "differential sociohistorical experiences and hence are likely to be associated with actual differences in expertise (KSA), in values (VBA), and in habits (PCB)" (p. 30). In addition, cultural identities are associated with certain behavioral tendencies and correspond to differences in social power.

Managing Diversity Paradigms

In reviewing the current diversity management practices, Thomas and Ely (1996) described a number of paradigms that organizations implicitly adhere to in an effort to manage diversity. One paradigm is the "discrimination-and-fairness" paradigm in which an organization "encourages and expects women and people of color to blend in" (p. 81). This is the paradigm that results directly from the Civil Rights Act of 1964 and similar legislation, ultimately stating "thou shalt not discriminate" on the basis of the RSRNO characteristics. The implicit expectation is that a person's RSRNO characteristics are irrelevant to the task at hand and should be ignored.

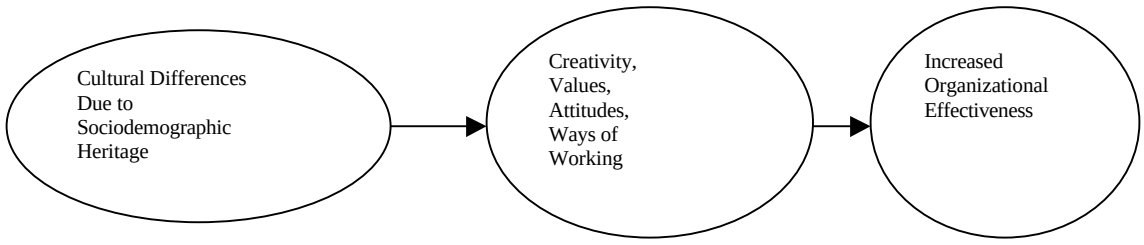
Another paradigm is the "access-and-management" paradigm by which the organization recruits and assigns women and "people of color" to positions in which they must "interface with clients or customers of the same identity group." Individuals with similar RSRNO characteristics are thought of as comprising identity groups. This paradigm represents a first step toward placing value on the RSRNO characteristics. The assumption is that the "main virtue identity groups have to offer is a knowledge of their own people" (p. 81). And following this assumption, women and

people of color are recruited and hired as a way of accessing certain previously ignored RSRNO groups in the population. This second paradigm values diversity from what might be called a utilitarian perspective.

Thomas and Ely (1996) referred to the third paradigm as an emerging learning-and-effectiveness paradigm which, in addition to the benefits of the first two, assumes that women, Hispanics, Asian Americans, African Americans, and Native Americans bring different, important, and uniquely relevant knowledge and perspectives about how to actually *do work*—"how to design processes, reach goals, frame tasks, create effective teams, communicate ideas, and lead" (p. 81). This is truly a substantial shift from the other two paradigms in one key aspect: Behavioral, intellectual, value-based, attitudinal differences that are associated with the RSRNO qualities are thought of as serving the ultimate good of the organization. This paradigm implies that organization members "frequently make decisions and choices at work that draw upon their cultural background—choices made because of their identity-group affiliations" (Thomas & Ely, 1996, p. 85). Thomas and Ely indicated this version of diversity to be reflective of a management strategy that taps diversity's true benefits.

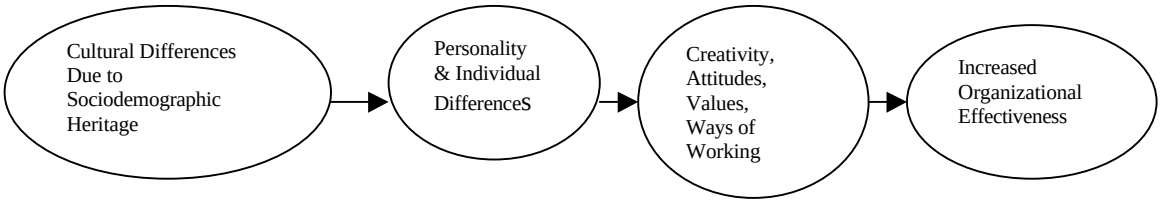
The authors of the current study would like to deviate here and point out what they believe to be a problem with the final paradigm. Thomas and Ely present an interesting set of hypotheses but do not present research to support their paradigm. They imply that cultural differences deriving from various sociodemographic categories lead members from these categories to solve problems in unique ways, work in novel ways, and to create conditions in the workplace that, if fostered, will make an organization flourish. The figure below depicts the implicit process.

Figure 3. Process Implied by the Thomas and Ely Third Paradigm



The implied process seems illogical from a scientific perspective. Specifically, it is not the different cultures per se that lead to creativity, values, attitudes, and ways of working. A more logical way of describing the process is to posit the existence of personality characteristics and individual differences that partially flow from the cultural and sociodemographic heritage. In turn, these individual differences determine creativity, values, attitudes, and ways of working. In other words, the authors prefer the process that is depicted in the following figure.

Figure 4. Modified Process Incorporating Personality and Individual Differences



Personality as one Basis of Diversity

Scenario ***ASPIRE Limited***. Consider a fictitious organization, ***ASPIRE Limited***. With a highly developed social consciousness, it values its human resources, and has established as one of its goals continuous improvement in the Human Resource area. Consider further that ***ASPIRE*** has long matured beyond the "thou shall not" phase of managing diversity. Having embraced Paradigm 3, ***ASPIRE*** recognizes the contribution of different cultures and celebrates the cultural heritage of its members.

Always aiming to improve, ***ASPIRE's*** Human Resource Department leaders become aware of the current developments in personality theory and measurement and its application to organizational improvement. They discover that personality characteristics are a way of conceptualizing diversity in the sense that all organizational members ***differ*** on their personality profile. They present two questions:

1. Should ***ASPIRE*** consider personality in its managing diversity program awareness with personality awareness?

2. Should ***ASPIRE*** emphasize personality over and above sociocultural diversity in its diversity program.

The authors believe that ***ASPIRE's*** questions point to the development of a new paradigm. In this paradigm, the **elemental** differences associated with all people's biological and environmental experiences are the basis of diversity. In the new paradigm, each person with his or her personal array of qualities commands respect in the sense that all people should be respected for who they are and from where they come. In addition, the new paradigm says the following:

1. Certain individual differences, personal qualities, and traits positively affect organizational effectiveness.

2. Certain individual differences, personal qualities, and traits have nothing to do with organizational effectiveness.

3. Finally, certain individual differences negatively affect organizational effectiveness.

This emerging paradigm has three drawbacks. First, it is unclear whether respecting individual differences in the personality sense implicitly leads to the practice of valuing **cultural** differences, which has become the politically correct thing to do in some organizations. Under the emerging paradigm, RSRNO qualities may garner less interest or attention than personality characteristics, which may have ***political*** and pragmatic repercussions.

Second, and more important than the political repercussions is the fact that certain values associated with cultural heritage might be ignored in the valuing diversity effort. It would seem that values, if indeed a part of cultural heritage as many would argue (e.g., see McGrath et al., 1995), should not be ignored in a valuing diversity program.

Third, even in the **best** implementation of a program designed to recognize and embrace the personality characteristics of individuals, one might hypothesize that cultural differences would be embraced concomitantly. But this hypothesis rests in the assumption that a thorough valuing-personality-difference program could be implemented: a valuing-personality-differences program that barely scratches the surface of the FFM (or any model in personality), or that is more slogan-based rather than rooted in a deep understanding may do more harm than good. Ultimately, the authors believe that the valuing-personality-differences program would be worthy of future study, particularly in the context of an organization that relies on teams for its success.

Given the three problems just discussed, it seems reasonable to expect an organization within the DoD to begin to pursue a valuing-personality-differences program while continuing to embrace the more traditional valuing cultural differences programs. This ensures that the value of cultural differences programs is not lost and provides the organization with time to understand that valuing personality differences indeed has the capability to move the organization toward the desired level of openness to difference. So, the new managing diversity paradigm is one that philosophically acknowledges that the basic qualities to be valued within organization's members are the qualities that bear on organizational performance in the broadest sense of the term. These qualities are expressed in terms of organization members' knowledge, skills, abilities, personality, and behaviors that emanate from cultural heritage, sociodemographic roots, genetic endowment, and unknown sources.

The fourth paradigm for managing diversity can be succinctly described in the following principle-like statement:

> ***Value, nurture, and protect any and all behaviors of the organization's members affecting present and future organization effectiveness.***

In order **NOT** to "throw the baby out with the bath water," implementers of the new paradigm would be careful to continue to protect the principles presented in the first three paradigms until such time when organizations can honestly pursue the basic premise to protect any and all behavior relevant to the organization's present and future effectiveness.

This paper, of course, pertains to leading diverse teams, not diverse organizations. This is a somewhat different matter because of the generally closer interaction and coordination required

in teams. In positing the effects of diversity on work groups, McGrath et al. (1995) suggest a number of considerations. First, the set of assumptions that one has in predicting diversity effects on work group performance has profound effects on the predictions that are made. Along these lines, McGrath et al. (1995) describes three common models held by diversity researchers. The first model assumes that diversity in demographic characteristics of work group members affects work group performance because these demographic characteristics imply underlying attributes in the KSA, VBA, and PCB areas. The second model states that diversity affects work group effectiveness because of the expectations that work group members have with regard to the demographic characteristics of the members. This expectations approach does not assume that there are deep characteristics linked to surface demographic characteristics—only that there is that expectation among group members. The third model is that demographic differences imply different levels of social influence (power) within the organization in which the work group is embedded or within society at large. McGrath et al. (1995) settle on a fourth integrative model which "allows for" all possible dynamics.

How do these models fit within the general framework of this paper? The crux of this work is a practical concern—leading diverse teams within the DoD. The overview of research perspectives presented by McGrath et al. do provide the basis for some practical answers to the problem of leading diverse teams. It is clear, for example, that the DoD is aware that diversity can affect the performance of its members through the medium of expectations of other members (Model 2) and through the medium of differential power bases (Model 3 above). Training at the Defense Equal Opportunity Management Institute (DEOMI) clearly addresses this model. It may be that Model 1 presented by McGrath et al. is less well addressed by DoD. Recall that Model 1 implies that demographic diversity (sociodemographic diversity) affects the outcomes of work groups because of associated underlying attributes. It should be noted that this line of thinking is in accord with our fourth paradigm above, which implies (if not states) that to the extent that sociodemographic characteristics imply job-related values, attitudes, behaviors, and traits, they should be valued. The authors of the current study believe that this approach would enhance the approaches (e.g., in DEOMI training) already embraced by the DoD. Specifically, we believe that DoD should pursue our fourth paradigm for valuing diversity. The optimal way for this to occur is through a programmatic development of team leadership and processes.

Team Leadership Defined

As stated above, teams are critical to the performance of many organizations, including the DoD. Hackman (1990) pointed out a team must be constructed and managed to reap the benefits of teamwork. Team leadership is a critical ingredient in building and managing teams. Team leaders participate in a variety of aspects of the team management process pertinent to team effectiveness. They may be involved in the selection, training, development, and other aspects of performance management. Larson and LaFasto (1989) indicated that leadership fundamentally changes the team conception of team effort. Burgess, Riddle, Hall, and Salas (1992) stated in their discussion of team leadership of teams under stress that "effective team leader behaviors will lead to effective team performance, and ineffective team leader behaviors will lead to ineffective team performance" (p. 6). Pratt and Jiambalvo (1981) argued that the team's potential cannot be maximized without attending to the problems, concerns, and matters of team leadership.

Steward and Manz (1994) stated that the benefits derived from teams depend on leader behavior. They go on to assert that effective team leadership is an essential aspect of team success and ineffective team leadership will surely lead to diminished team performance. Ruggeberg (1996) provided a summary statement based on his exhaustive review of the literature on team leadership: "In general, a review of the team literature suggests that team leadership is one of the most critical ingredients in effective team performance, impacting all team processes, both directly and indirectly" (p. 4).

Despite the general and sweeping statements with regard to the importance of team leadership on team performance, few studies have explicated the idea in behavioral terms. Ruggeberg (1996) is an exception. Ruggeberg's work focused on the definition of team leadership and—beyond this—toward a classification system that identifies the **types** of team leadership. Using a variety of analytical strategies with a sample of actual teams, Ruggeberg proposed a classification system summarized in Table 1. It is important to note that team leadership in Ruggeberg's model does not necessarily refer to a person. Rather, leadership is a process by which a team is led. A good example of this appears in Table 1 as "self-management" team leadership.

Table 1

Summary of Ruggeberg's Team Leadership Classification System (Ruggeberg, 1996)[1]

Type	Team Leadership Descriptor	Summary of Team Leadership

[1] Table 1 is based on Table 20, Ruggeberg (1996, p. 205)

I	Self-management	Very little process management or guidance toward goal attainment; low structure and leader responsibilities; low importance of process management knowledge, skills, abilities, and other characteristics; limited member responsibilities
II	Advisory	Very low involvement in team activities; high guidance toward goal attainment; open communications
III	Transformational	High transformational leadership, integration, initiating structure, involvement with team and shared leadership
IV	By-the-Book	Very low consideration, tolerance of freedom, openness to ideas or concerns, importance of interpersonal KSAOs, representation of team, transformational leadership; high importance of process management KSAOs.

V	Boundary Management	High boundary management behaviors and tolerance of freedom; very low leader role assumption & initiating structure; low integration, team building, & leader responsibility; low importance of process management KSAOs

Ruggeberg's work is seminal in the sense that it classifies team leadership into types. In his work, he makes recommendations for application of the team leadership types and the team types that they might associate themselves with. It seems clear that, depending on the work group under consideration within DoD, all team leadership types exist and are relevant to the department. However, for mission-related teams in defense-related tactics, perhaps the "Transformational" leadership (Type III in Table 1) and "By the Book" leadership (Type IV in Table 1) are most critical.

Team leadership as the conduit for managing diversity initiatives. Team leadership is an ideal mechanism by which team diversity should be managed and valued. The authors believe this on purely pragmatic grounds. Through team leaders, the organization's evolving strategies for valuing diversity (such as the fourth paradigm) can be relatively straightforwardly delivered to the organization. Team leaders can be trained universally in the nuances of diversity and expected to acquire a modicum of competence in the topic if not mastery of the topic. So team leader training can be implemented throughout DoD on the basic tenets on team leadership and in particular on the issues pertaining to diversity. Because team leaders have ongoing, close contact with their fellow team members, team members will regularly come into contact with the theories and practice of team leadership, particularly as it pertains to managing diversity. Establishing team leader training across the organization (such as the various organizations comprising DoD) will serve to create a common understanding of team performance and a common understanding of what we believe is a critical element of team performance—diversity of team members. There is another benefit of implementing evolving diversity management strategies through team leadership. As we described above, one of the sources of diversity within a work group is personality. The topic of personality as an element of diversity is much more complex than the RSRNO characteristics. To understand diversity at the level of personality requires some study on the part of the diversity manager and understanding of the effects of personality on group processes and leadership. By providing team leadership training with a reasonably detailed focus on personality theory, diversity management efforts will be enhanced.

Personality and Its Use as One Basis for Understanding Diversity

In the previous sections of this paper, it was proposed that team diversity should be examined not only from a demographic perspective but also from a deeper personality and individual difference perspective. Furthermore, it was suggested that diversity of team members is important to the extent that it bears on the performance and effective functioning of teams. Note that a broad perspective was taken on effective functioning, including the issues of the well-being of team members. Personality theory has been developed and empirically examined for over one hundred years. The field has received a significant boost in the past 15 years with the development of comprehensive factor-based theories and enhanced methods of assessment. Organizations, in general, have recognized the value of personality in human resource management functions. This is true of DoD as well. The following section reviews literature in the application of the Five Factor Model of personality (FFM) within DoD. This review was focused on DoD in particular, but also included research on teams. The goal was to provide the reader with an appreciation of the work that DoD has already done in the applying modern personality theory to its staffing and other HR functions.

There are a number of questions that the authors had prior to this review. Some of them are answered and some are not. Below is a partial list of some of questions and concerns:

1. Is there an optimal mix of personalities comprising a DoD team? Or alternatively, is there a non-optimal mix to be avoided?

2. Is there an optimal personality profile of a team leader?

3. Is there an interaction between team leader personality profiles and team member personality profiles?

4. Is there an interaction between optimal team personality profiles and team types?

The Five-factor Model of Personality (FFM)

Although certainly not the first factor-based theory of personality (cf. Eysenck & Eysenck, 1963), the FFM has grown in popularity and is readily measurable through the NEO-PI-R (Costa & McCrae, 1990). Further, consensus has been reached in the literature that the FFM is the current best approach for modeling personality (Wiggins & Trapnell, 1997), although it is not immune from valid and potentially serious criticisms (Hough & Schneider, 1996). The literature on the FFM has steadily grown, although it is far from complete due to the relative recency of the publication of the NEO-PI-R. Despite this, the FFM has been applied within the Department of Defense.

The FFM includes Extraversion (versus introversion), Neuroticism (versus emotional stability), Openness to Experience (versus closed to experience), Agreeableness (versus not agreeable); and Conscientiousness (versus nonconscientiousness). These five personality factors are continuous and normally distributed. That is, individuals can be described as having “more or

less" of each factor, with about 68 percent of individuals falling somewhere in the middle of the continuum. Thus, the majority of individuals are neither "Extraverted" nor "Introverted." Perhaps of interest for teams and team leadership are those people who place in the tails of the distribution; yet, there is little research on those who scores fall on the extremes of the five factors.

Each of the five factors includes six facets or subscales. Extraversion is composed of the facets of warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions. Neuroticism includes the facets of anxiety, angry hostility, depression, self-consciousness, impulsivity, and vulnerability. Openness to experience includes fantasy, aesthetics, feelings, actions, ideas, and values. Agreeableness contains trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. Finally, Conscientiousness is composed of competence, order, dutifulness, achievement striving, self-discipline, and deliberation.

FFM and Diverse Teams

Relatively little published research is available on the FFM and teams, and diverse teams have not been systematically examined within the FFM framework. However, one researcher (Howard, 1996) has developed a training program that includes a team variable of "comfort and appreciation for diversity" (p. 15). Comfort with and appreciation for diversity is contrasted with a tendency towards prejudice. According to Howard, individuals who are comfortable with diversity have a personality constellation that includes low anger (low N), high openness to experience, and high compliance, modesty, and tender-mindedness (high Agreeableness). This is consistent with Johnson (1997) who hypothesized prejudice and authoritarianism to be moderated by high Neuroticism, low Openness, and low Agreeableness.

Although little empirical research exists on the FFM and diverse teams, the model has been researched in the work setting and information is known regarding factors relating to productivity and other outcome measures. Additionally, leadership and training profiles of respective groups of individuals have been examined. This section will review selected literature with an emphasis on DoD research and military samples.

FFM and Teams

Selected group processes can impact team performance. With respect to Army teams, Beck and Pierce (1996) identified several processes impacting team performance that are likely related to the FFM. Out of these processes, environmental stressors, group cohesion, groupthink, and leadership variables are of primary importance for the present paper.

Environmental Stress. The effect of environmental stressors on team performance has received attention in the literature. One interesting study examined the effects of status and stress on decision making in dyads of U.S. Navy personnel (Driskell & Salas, 1991). Results provided support for the increased receptivity hypothesis (Driskell & Salas, 1991), which holds that stressful situations make both leaders and subordinates very responsive to input from other group members. In short, subordinates are more willing to follow leader guidance, but leaders are also

more likely to seek advice from their subordinates. Thus, stressful situations contribute to greater receptivity for all individual team members.

The factor of Neuroticism (N) includes stress-related facets of anxiety, impulsivity, and angry hostility. As an individual difference variable, it is likely that team members with higher levels of N are more vulnerable to stressful situations. Neuroticism may be likened to arousability, or emotional reactivity. Team members who are high on this factor may be exceptionally reactive to stress and less resistant to emotional upheaval typically associated with intense situations or crises. Although the clinical and counseling literature is replete with examples of the effects of High N on adaptive functioning, no research can be found that addresses this issue with respect to team functioning. For example, it is well documented that High N predisposes an individual to clinical levels of depression and anxiety (Eysenck, 1947) largely related to relative inability to manage stress in a non-emotionally reactive manner. It is of critical empirical and practical importance to ascertain the effects of individuals with High N on team performance, particularly under stressful conditions.

Directly related to N is the notion of negative affectivity (NA: Tellegen, 1982; 1985), which has been examined in the workplace. NA refers to an individual's prevailing emotional experience. Those high in NA tend to experience negative emotions and moods. They frequently experience negative feelings and are distressed both by their own thoughts and experiences as well as those of others. (Tellegen, 1982; 1985; Watson & Pennebaker, 1989). Often, this translates into thoughts and actions that result in negative affective experiences. NA is contrasted with Positive Affectivity (PA), which refers to tendencies to experience positive emotions and feelings. Those high in PA experience little distress, with consequent positive mood. NA and PA are related to job performance, particularly work-related strain. In general, those high in NA report their work to be more stressful than those low in NA (Burke, Brief, & George, 1993). To date, NA has not been examined with respect to teams and working groups; however, there is recognition of the need for empirical research (George, 1996). Similar to N, NA undoubtedly affects team functioning and performance, and empirical information is notably lacking.

Teamwork Stress: Team Composition and Team Cohesion

Another phenomenon in the literature is that of "teamwork stress" (Morgan & Bowers, 1995, p. 266), which includes many environmental stressors but refers largely to a change in team interaction processes and performance. Often, this involves an alteration in the team's capacity to obtain desired goals and objectives. Although there exist many types of teamwork stressors, team composition and team cohesion constitute two of them. Team composition is defined as the degree to which team members are similar to one another. This has been examined from many perspectives, including gender and ethnicity. In general, it is been found that homogeneous teams may exhibit increased cooperation (Lodahl & Porter, 1961) and experience less conflict than heterogeneous teams (Bass, 1965). However, these findings depend upon the criterion or team outcome variable. When the criterion involves creativity and enhanced problem-solving, heterogeneous teams are more effective (Goldman, Dietz, & McGlynn, 1968). Note that heterogeneity has been defined in various ways including such sociodemographic variables as race and gender. Although little is known regarding heterogeneity in terms of individual team member

personality, Hoffman and Maier (1961) demonstrated that personologically hetereogeneous teams produced better responses on a team problem-solving task.

Team composition in the military has been examined with respect to gender. In general, however, findings have been mixed (Jackson, May, & Whitney, 1995; Wood, 1987), and Wood's (1987) meta-analytic study suggested the need for examining gender-affected interaction patterns. Elliott, Hollenbeck, & Tower (1996) performed a well-designed laboratory study on high stress tactical decision-making teams. Importantly, this study was embedded in a theoretical model of team performance (multi-level theory; Hollenbeck et al., 1995) where team members possessed the type of differential expertise and hierarchical structure common to military teams. Results indicated significant gender-related differences in performance, with all male teams performing most accurately, and teams with a leader who was a man and two woman subordinates performing least accurately. These differences were attributed to gender-based differences in communication style as well as efficiency of information exchange. Team members of low-performing teams did not gain the information necessary for accurate decision-making.

In addition to examining gender-based communication patterns among teams, it is important to note there are some gender-based differences in the five factors of personality. For example, it is known that women tend to score higher on Agreeableness than men (Costa & McRae, 1990; 1992). This tendency could be manifest in a team through an unwillingness to disagree and a bias towards acquiescence in decision making. Along similar lines, women tend to score higher on Neuroticism than do men (Costa & McRae, 1990; 1992). In a gender diverse team, this may be manifest in greater levels of reactivity relative to men. The interaction between personality and gender on team performance variables has not been established and constitutes a fruitful area for research.

Team Cohesion

Team cohesion is another form of potential teamwork stress. It refers to the mutual attraction among members of a group and the resulting desire to remain in the group (Eddy, 1985) and is an important factor in team performance. Griffith (1988) reported that cohesive Army units are more willing to reenlist in their unit, view their units as more combat ready, are more satisfied with the Army, and report higher personal morale. In general, cohesion has a positive effect on group performance in that cohesive groups are more productive (Driskell & Salas, 1992), more interactive (Fisher & Ellis, 1990), disagree less (Morgan & Lassiter, 1992), and make better decisions (Valacich, Dennis, & Nunamaker, 1992). Recall that team composition is one aspect of team orientation, which is a necessary condition for efficient team performance (Dickinson & McIntyre, 1997).

Cohesion is a multidimensional construct and includes at least two dimensions, task cohesion and interpersonal cohesion (Beck & Pierce, 1996). Task cohesion refers to task performance/commitment and is more important than interpersonal cohesion (referring to interpersonal support and attraction) for facilitating performance (Zaccaro, 1991). Further, Mullen, Anthony, Salas, and Driskell (1994) conclude that positive group decision quality is attributable to the influence of task cohesion. When decision quality decreases, this is related to

the influence of interpersonal cohesion. Importantly, Mullen et al. (1994) believe that interpersonal cohesion may contribute to groupthink and that task cohesion may eliminate or minimize groupthink.

The role that personality plays in group cohesion is unknown, but it is highly probable that personality mediates group cohesion. Mutual attraction among members and the desire to remain in the group are likely moderated by the factors of Extraversion, Agreeableness, and Neuroticism. Extraverts are known for their propensity to seek affiliation and gregariousness hence predisposing them to increased social interaction conducive to group cohesion. On the other hand, introverts often prefer solitary activity and may not be particularly affected by a desire to remain in the group. Introverts may be slower to value group cohesion or less willing to engage in social interaction that foments group cohesion. Agreeableness is another factor that would relate to group cohesion. Individuals low in Agreeableness may be competitive (as opposed to cooperative), lacking in trust, suspicious and skeptical of the motives of others, and tough-minded. These characteristics may impede development of group cohesion, in that individuals who are suspicious of others likely have little inclination to be attracted to and remain in their group. Finally, Neuroticism may affect group cohesion through individual proneness to self-consciousness, anxiety, and anger. These individuals may be sufficiently high in subjective distress levels so as to disrupt other-directedness necessary for group cohesion. All of these potential interactions between personality and group cohesion are in need of empirical examination.

Groupthink

Groupthink describes a problematic phenomenon resulting when stress, high group cohesion, and leadership style combine to reduce disagreement among subordinates (Janis, 1972; 1983). During groupthink, teammates convince one another of the correctness of the leader's decision, and these tendencies are heightened during greater situational stress. Groupthink involves members rallying around the leader, and the major danger is that the number of options considered by the team is limited. This occurs because the group leader may believe the team sees the merit of his or her views, when in actuality members are not actively thinking and are instead simply being supportive of the leader's views. Although the prevalence of groupthink in DoD teams is unknown, some authors (Beck & Pierce, 1996) believe the phenomenon undoubtedly exists, needs to be acknowledged, and preventative strategies implemented when possible.

Application of the FFM to groupthink may be useful. The factor of Agreeableness may be particularly important in that teams composed of highly agreeable individuals may be prone to unquestioned acceptance of a leader's position. The Agreeableness facet of compliance may be particularly useful in that individuals high in compliance may be predisposed to groupthink. In efforts to be cooperative, individual members may actually impede team processes and decision-making. On the other hand, consider a team composed of individuals high in Extraversion. Extraversion, with its facet of assertiveness, may buffer a team from the potential of groupthink. Extraverts are generally more outspoken and assertive than those lower in this factor, and may serve as individual safeguards of groupthink.

The factors of Openness to Experience and Neuroticism may also be important in groupthink. High openness can lead an individual to value almost any idea and decrease the focus on task accomplishment. Under stress, such individuals may be overly receptive to the input from both leader and team members to the exclusion of previously held ideas. Hence, their value as a team member would be reduced. Finally, high Neuroticism predisposes individuals to be emotionally reactive to stress and experience frequent anxiety. They may be prone to readily agree with the leader and other team members in an effort to quell internal distress and inadvertently contribute to groupthink. As in the case of high openness, this ultimately reduces their effectiveness as a team member/contributor. When a team is likely to be subjected to stressful situations, it may perform better when composed of members partly selected on the basis of the FFM.

FFM and Leadership

The relation between personality characteristics and leadership is characterized by research that is fragmented and narrow in focus (Nysted, 1997). Leadership has been broken down into areas such as behavioral styles, traits, and environmental constraints, and authors such as Nysted (1997) have called for a more holistic approach to integrate complex trait patterns with leadership variables. The FFM is presently being assessed, and its relation to leadership is presently being examined (Aditya, 1998), but data collection efforts are ongoing and final results are not presently available.

Despite this lack of research, it is known that a flight crew captain's personality affects the performance of his or her crew. Crews with captains characterized as warm, friendly, self-confident, and stable made fewer errors than crews with egotistical, hostile, and passive-aggressive captains (Foushee & Helmreich, 1988). Notably this study did not use the FFM but did use adjectives and descriptive personality terms consistent with other factor-based models of personality. Specifically, the warmth, friendliness, and self-confidence found in this study of leadership is typical of Extraversion. Similarly, the feature of stability is associated with Neuroticism, or low reactivity.

FFM Group Profiles, Selection, and Training

Although it has recently been acknowledged that personality measurement can be useful in employment decisions such as selection, training, and performance, it is critical to remember that its utility is constrained by the nature of the job. For example, Barrick and Mount (1993) note that some positions are highly scripted, and detailed procedures necessary for efficient performance allow little room for personality to affect performance. The work of Hogan and Hogan, (1993) addresses this issue. These authors developed the 5 X 6 Model, which classifies jobs into the six Holland occupational categories and then examines the validity coefficients of the FFM. Use of this model results in higher correlations between personality and job performance, insofar as it takes into account both the FFM and the six occupational types.

Hogan, Hogan and Roberts (1996) illustrate this principle in the example of a truck driver. Using Holland's codes, a truck driver is classified as a realistic-conventional occupational type.

Well-performing people in the realistic-conventional occupation are hard working and likely fit well into an organization. However, they may not perform as well in administrative, leadership, or team member roles, which require extensive communication skills. Using the FFM, personality characteristics associated with the realistic-conventional occupational type include high Conscientiousness and low Neuroticism, and these two factors are associated with the classification of truck driver (Hogan & Hogan, 1995).

Of critical importance is the fact that Agreeableness, Extroversion, and Openness to Experience may be relatively unimportant for the occupation of truck driver with its realistic-conventional job classification. Hence, use of the FFM in employment decisions is maximized when the performance demands of the job are known and used in tandem with the FFM. Use of the FFM may be inappropriate in those instances where a job analysis is lacking, or when the job role is so routinized there is little room for personality to serve as a mediator of performance. In this latter instance, the situation must not be so demanding as to overwhelm sources of individual variation in job behavior. Even in this latter instance, however, the empirical question remains of whether someone extremely low in extraversion can perform effectively as a college professor or platform speaker.

In addition to the above cautions, it is important to note that FFM profiling of the "ideal" candidate for training programs and occupations is in its infancy, likely due to the relatively recent publication of the NEO-PI-R. However, some empirical information is available.

With respect to military samples, Braun, Prusaczyk, Goforth, and Pratt (1994) reported on the personality profiles of U.S. Navy Sea-Air-Land commando (SEAL) trainees. This interesting study addressed the issue of high rates of attrition among SEAL trainees, and incorporated the FFM in an attempt to improve selection and training. Braun et al. noted that selection efforts have historically been directed to intelligence, maturity, physical performance, and combat skills. Hence, introduction of the FFM represented a new and additional variable to assist in selection. Results from this study indicated personality differences between more-experienced and less-experienced SEALs, but these were attributed to the effects of age. There were also differences between commissioned officers and enlisted SEALs in that commissioned officers were significantly higher on Extraversion and Conscientiousness. When compared to published norms for adult men, SEALs were lower in Neuroticism and Agreeableness, average to lower in Openness, and higher in Conscientiousness and Extraversion. Hence, relative to the normative (and civilian) group, Brown et al. provided a description of an "average" U.S. Navy SEAL:

> *"This subset of SEALS appear to be calm, hardy, secure, and not prone to excessive psychological stress or anxiety. They are level-headed, practical and collected even under very stressful or dangerous situations. They are rarely impulsive and have strong control over cravings or urges. Active and assertive, they prefer being in large groups and are usually energetic and optimistic. They seek excitement and stimulation and prefer complex and dangerous environments. They are very competitive, skeptical of others' intentions, and are likely to aggressively defend their own*

> *interests, but are not hostile. Finally, they are purposeful, well organized, persistent, and very reliable."* (p. 16)

Note the lower Neuroticism and Agreeableness and higher Extraversion and Conscientiousness scores manifest in this description. This study directly pertains to DoD teams, insofar as SEALs often work in tactical teams. Paradoxically, one challenge may lie in the low Agreeableness and Neuroticism scores. For example, teams may be impeded by competitiveness (low scores on Agreeableness) on the part of individual members. Similarly, lack of anxiety (low Neuroticism), could potentially lead to groupthink (Janus, 1972; 1983) and not provide sufficient safeguards against dangerous situations. Although it is likely that low Neuroticism would be essentially valuable in tactical teams, future research needs to be directed to levels of N that are ideal to balance relative lack of anxiety and such factors as appraisal of dangerous situations.

The FFM has also been used to profile the personalities of U.S. Air Force pilots. With a relatively large sample of both men and women pilots (N=1301), Callister, King, Retzlaff, and Marsh (1997) administered the NEO-PI-R and examined pilot scores on the five factors versus standardized norms for the general population. These authors found that both men and women student pilots were higher in Extraversion and lower in Agreeableness than adult norms drawn from the general population. Women student pilots were also higher in Openness than women from the general population. The authors then proceeded to discuss the usefulness of the FFM in assessment and possible intervention with student pilots.

This article is noteworthy in documenting personality differences between a military occupational category (such as student pilots) and non-military samples. However, it does not appear that these differences are statistically significant, and the results must be interpreted cautiously. Visual inspection and comparison of the Extraversion facets indicate elevated scores emanated from certain facets. Specifically, both men and women student pilots were higher on the facets of assertiveness, activity, and excitement-seeking. They were lower on the Agreeableness facets of compliance and tender-mindedness. Women student pilots were also lower on the Straightforwardness facet. Interestingly, both men and women student pilots demonstrated similar personality profiles relative to the general population.

With respect to the FFM and its utility in selection and classification, Pederson, Allan, Laue, Johnson, and Siem (1992) examined its utility relative to alternative personality theories. Comparisons were made between models of personality theory and the authors concluded the FFM was the most appropriate for aircrew selection and classification. Of course, personality is viewed as one more attribute to include in selection and training, in addition to the physical, academic, and aptitude requirements already in place.

The work of Street, Helton, and Nontasak (1994) is closely related. They examined the FFM in the selection of landing craft air cushion (LCAC) vehicle crewmembers. Specifically, these authors first used principal component analysis to extract factors from the Adult Personality Inventory (API), and then principal factor analysis to remove unique and error variance and obtain a solution. The factors were then labeled and compared to the FFM. Both exploratory principal components analysis and the confirmatory principal factor analysis produced five factor solutions

that corresponded to the FFM. Hence, the five factors were derived from the API. The authors concluded the "derived API openness variable includes traits of practicality and conventionality. The significance of the practicality trait is such that individuals who are more conventional and practical tend to do better in the overall LCAC training program." Included are indices of psychomotor coordination and decision-making skill drawn from the Landing Craft Air Cushion Vehicle Crew Selection System (LCSS), which is a computerized test battery (see Helton, Nontasak, & Dolgin, 1992 for further information). The major significance of this study is that high Conscientiousness and lower Openness appeared to predict success in the LCAC training program.

Cortina, Doherty, Schmitt, Kaufman, and Smith (1992) examined the FFM, MMPI, and Inwald Personality Inventory in prediction of training success for state police recruits. Hierarchical regression revealed that Neuroticism and Agreeableness added to the predictability of training criteria. In this study, Conscientiousness did not add to the prediction. However, when incremental validity of personality tests over the Civil Service exam were examined, they were small. Thus, the incremental yield of information using the FFM was questionable in this study.

FFM and Work-related Variables

The FFM has been examined in terms of work-related variables such as job performance, and there is related literature on important correlates such as procrastination and task avoidance. For example, a meta-analytic study found Conscientiousness to be predictive of job performance across five categories of employees (Barrick & Mount, 1991). Job performance was measured through job and training proficiency and personnel data. This study was important in that it included various groups of workers ranging from professionals to skilled/semiskilled workers. Further, Conscientiousness is highly related (inversely) to procrastination and task avoidance (Johnson & Bloom, 1994), which holds implications for efficient job performance and achievement within deadlines. Although Conscientiousness has received empirical attention, relatively little is known regarding the other four factors (Extraversion, Neuroticism, Openness to Experience, and Agreeableness) and job performance criteria.

Examination of the Use of the Five Factor Model in the Training of DEOMI's Study Groups

As a part of the effort to examine the application of the FFM within DoD work groups and teams, the authors took the opportunity to examine how the personality theory might be applied within DEOMI's training mission. DEOMI's primary mission is the training of Equal Opportunity Advisor's (EOAs) from the various defense-related organizations comprising DoD. The job of the EOA after graduating from DEOMI is to serve as a resource person within his or her unit on equal opportunity issues. The EOA is the resident expert within his or her DoD unit and serves in a variety of roles including trainer, ombudsperson, and advisor to the commanding officer. The position is somewhat fluid and depends on the Service within which the EOA works and on the role assigned to him or her by the commanding officer.

EOA training covers 15 consecutive weeks. Intensive in nature, it is designed both to inform as well as change attitudes within the student on the general topics of prejudice, equal opportunity, and diversity. An important aspect of the training is the implementation of what might be called C-Groups (C-Group is a small group process which focuses on the exploration of group identifications, e.g. racial, religious, ethnic, etc.). C-Groups are implemented in EOA training during the entire 15-week training period. Groups are formed prior to the students' arrival at DEOMI and are formed in such a way as to equally represent race, gender, ethnicity, and cultural heritage. By definition, each group to which a student is permanently assigned is a socioculturally diverse group. Sociocultural diversity is created in order to provide students with a better learning environment within which to learn about the effects of diversity. Clearly, it is anticipated that students will take the experiences of working in such diverse groups and apply them to their upcoming EOA positions.

The existence of such groups within DEOMI provided an ideal opportunity to examine the effect of personality diversity within socioculturally diverse groups through a pilot study. Although these work groups were not tactical teams in the classic sense of the term, they did indeed comprise real organization members in a real task—a learning task—for a reasonably long duration. They had a goal and that was to acquire competency in the skills and knowledge required in the EOA position. This goal was shared by all. Finally, they worked interdependently both in the C-Groups and on occasional joint projects. Based on this line of reasoning, it is believed that the C-Groups receiving EOA training represent a type of team. Furthermore, the importance of this training leads to the conclusion that the examination of the FFM within the EOA training may provide some fruitful insights for future investigations.
The authors entered this phase of the research with the following questions:

1. What is the effect of different personality mixes on the C-Group processes?

2. What is the effect of different personality profiles on the emerging leadership of the small training groups?

3. Is there any evidence of an interaction effect of the personality of the emergent group leaders of the small groups and the personality profiles of the other group members?

4. What might be the advantage of educating group instructors in the nuances of the FFM on the effectiveness of instruction?

These questions could not be thoroughly studied with only one EOA 15-week class. However, the authors identified research that might be continued in the future. It is in effect a way of implementing the fourth research question discussed earlier.

Method

Participants

The EOA Class of 98-2 consisted of 98 individuals (65 men and 33 women) who were being trained to work in the equal opportunity field. As in every EOA class individuals were assigned to small groups. Each small group was composed of 16 or 17 trainees and two DEOMI staff instructors. There were six small groups in the present study, and groups were composed to be diverse with respect to gender, rank, service, ethnicity, and education. The following table summarizes the six groups with respect to these variables. (See Table 2.)

Table 2. Demographic Characteristics of DEOMI Class 98-2

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
GENDER						
Female	6	5	5	5	6	6
Male	11	11	11	11	11	10
RACE						
Korean	1	0	0	0	0	0
Am.						
Filipino	0	1	0	0	0	0
Puerto	1	0	1	1	1	1
Rican						
Other	0	1	1	1	0	0
African	8	7	8	8	10	8
Am.						
Caucasian	7	7	6	6	6	7
GRADE						
O-2—O-4	1	1	1	1	0	0
E-9	0	1	1	0	0	0
E-8	0	0	0	0	2	1
E-7	11	11	11	11	8	11
E-6	1	0	0	1	1	0
E-5	3	3	3	3	4	3
GS7—	1	0	0	0	2	1
GS15						
BRANCH						
Army	10	11	10	10	7	9
Navy	1	1	1	1	2	2
Air Force	3	3	3	5	5	3
Marines	1	0	1	0	1	0
Coast Grd.	1	1	1	0	0	0
Army Civ.	0	0	0	0	1	1
AF Civ.	1	0	0	0	0	0
Other	0	0	0	0	1	0
EDUCA.						
High	3	1	1	2	1	3

school						
Some coll. (15 hrs.)	6	6	7	6	7	7
Associate Degree	5	6	5	4	3	5
Bachelors	1	0	3	2	4	1
Some grad. Study	1	2	0	1	0	0
Masters	1	1	0	1	1	0
Doctorate	0	0	0	0	1	0

Procedure

Each student completed the NEO-PI-R according to standard instructions. This instrument is known to be reliable and valid (Costa & McRae, 1990; 1992) in measurement of the five factors and their facets. Two instructors were assigned to each group and completed a teamwork measurement instrument based on the work of Dickinson and McIntyre (1997). (See Appendix 1.) Rosenstein and Dickinson (1996) evaluated the reliability and construct validity of the measurement instrument and found adequate empirical support for both. This questionnaire assessed the performance of teams on the seven teamwork components described above. Responses remained anonymous and were numerically coded.

Results

General Characteristics: EOA Class 98-2

Several descriptive analyses were undertaken in this project. First, the EOA Class 98-2 (N = 98) was compared to published norms for the general population across the five factors. The class did not differ substantially from the general population. Across the sample of 98 students, the mean T scores for the factors were as follows: Neuroticism: 50.03 (SD = 8.64); Extraversion: 53.00 (SD = 9.76); Openness to Experience: 51.91 (SD = 10.96); Agreeableness: 47.00 (SD = 11.29); and Conscientiousness: 55.67 (SD = 11.01).

Secondly, between-group analyses were conducted to establish the presence of any gender or racial group differences with respect to the FFM. There were no significant differences between racial groups on the five factors. However, significant gender differences were present with women displaying greater tendencies towards Agreeableness, F (1, 96) = 4.18, p <.03, and Openness to Experience, F (1, 96) = 6.53, p < .01, than men. Women had a mean score of 50.44 (SD = 9.22) and men a mean of 45.25 (SD = 11.89) on Agreeableness. Means on Openness to Experience were 55.77 (SD = 10.00) and 49.95 (SD = 11.89) for women and men, respectively.

Further analyses indicated certain facet scales contributed to the gender differences in Agreeableness and Openness in this sample. For Agreeableness, the facet of Compliance was significant in that women obtained a mean score of 49.41 (SD = 11.53) and men a mean score of

43.86 (SD = 10.98). Openness to Experience had facets that were significantly different between men and women, including Aesthetics and Actions. Women obtained a mean score of 54.81 (SD = 9.88) and men 49.01 (SD = 11.10) on Aesthetics. On Actions women obtained a mean score of 56.78 (SD = 10.58) and men 49.62 (SD = 11.64).

Rank had an effect on one of the five factors. Since the majority of the sample was enlisted, the enlisted individuals were bifurcated into lower (N=22: E-5 and E-6) versus higher (N=68: E-7, E-8, and E-9) paygrades. These two groups were significantly different on the factor of Neuroticism, F = 13.05 (1, 88), p < .001. The lower rank individuals obtained a mean score of 55.45 (SD = 10.3) and higher ranks obtained a mean score of 48.12 (SD = 7.59) indicating lower levels of Neuroticism among higher ranks. Examination of the facet scales associated with Neuroticism indicated lower ranks experience higher levels of Anxiety, F (1, 88) = 5.66, p < .02, Angry Hostility, F (1,88) = 10.53, p < .002, depression F (1, 88) = 4.06, p < .04, and Vulnerability F (1, 88) = 14.53, p < .0001 than higher ranks. Taking these facet scales in this order, lower ranks had means of 54.06, 56.83, 52.30, and 49.06 and higher ranks had means of 49.18, 48.27, 47.59, and 40.64, respectively.

Small Groups: EOA Class 98-2

Personality scores for the six small groups were also subjected to various analyses. There were significant differences between Extraversion, F (5, 92) = 2.62, p < .02), and Agreeableness, F (5, 92) = 2.35, p < .04). For Extraversion, significant differences were found on the facet scales of Warmth, Activity, and Positive Emotions. Warmth differed between Group One and Groups Three, Four and Five, F (5, 92) = 2.79, p < .02. Group One had a significantly larger value (M = 55.39) than the other three groups, where Group Three had a mean score of 47.59, Group Four had a mean of 45.56, and Group Five a mean of 46.13. The facet of Activity was also significantly different, F (5, 92) = 3.64, p < .005, between certain groups. Specifically, Group Five was lower (M = 46.76) than Groups One (M = 53.31) Two (M = 54.46), and Three (M = 53.32). Group Six (M = 60.42) was higher than Groups Three (M = 53.32), Four (M = 52.47) , and Five (M = 46.76) on Activity. The Positive Emotions factor was significantly different, F (5, 92) = 2.93, p < .01 between Group Four (M = 45.94) and Groups One (M = 56.61), Two (M = 56.50), Three (M = 53.86), and Six (M = 54.69), with Group Four scoring lower than these latter groups. Finally, Group Five (M = 49.03) was significantly lower on Positive Emotions than Groups One (M = 56.61) and Two (M = 56.50).

Agreeableness was also significantly different between some of the small groups, F (5, 92) = 2.35, p < .04. Group Five (M = 43.29) was significantly lower than Groups One (M = 53.69), Two (M = 49.69) and Six (M = 46.23). Examination of the facets indicate Altruism to be significantly lower in Group Five (M = 47.61) than in Group One (M = 57.02), Group Two (M = 56.67), and Group Six (M = 56.14).

Small Groups: EOA Class 98-2 and Outcome Measures

The six DEOMI small groups (learning teams) were analyzed with respect to outcome measures of group processes. Table 3 indicates significant differences across the six learning

teams on all seven teamwork components. Post hoc analyses, also summarized in Table 3, indicated that Team 4 is the most effective and Team 5 is least effective.

Table 3. Summary of Analyses of Variances (ANOVAs)
On Teamwork Process Measures Across 6 Learning Teams

Teamwork Component	F-Statistic and p values	Team Post-Hoc Differences
Team Orientation	11.037, $p < .006$	1 vs. 5, 4 vs. 5, 4 vs. 6
Team Leadership	9.932, $p < .007$	1 vs. 5, 1 vs. 6, 4 vs. 5, 4 vs. 6
Monitoring	8.908, $p < .010$	4 vs. 5
Feedback	6.285, $p < .022$	4 vs. 5
Communication	13.387 $p < . .003$	1 vs. 5, 2 vs. 5, 4 vs. 5, 4 vs. 6
Backup	7.442 $p < .015$	4 vs. 5, 4 vs. 6
Coordination	21.793, $p < .001$	1 vs. 2, 1 vs. 3, 1 vs. 5, 1 vs. 6, 2 vs. 4, 3 vs. 4, 4 vs. 5, 4 vs. 6

Table 4 provides a summary of similar analyses for nine single-item performance measures, overall composites of the nine items, the stage of development of the team (where 1 is the beginning stage and 4 is the highest stage), and six single items measures of interaction processes. Most probably because of the fact that these measures were not as reliable as the multi-item measures corresponding to the seven teamwork components, there were fewer significant differences associated with them across the six learning teams. However, Team 4 did show its superiority on accomplishing its goals, meeting performance goals in a timely manner, and overall performance.

Table 4. Results of ANOVAs on Team Outcome Measures

Team Outcome Measure	F-Statistics and p Values	Team Post Hoc Differences
Team goals accomplished	10.600, $p < .006$	3 vs. 5, 4 vs. 5
Meet expectations of the team	Nonsignificant effect	
Meet performance goals in timely manner	10.400, $p < .006$	2 vs. 5, 2 vs. 6, 4 vs. 5
Team regards output as	Nonsignificant effect	

adequate		
Team achieved goals with few errors	5.971, p < .025	Only marginal differences
Team produces output suitable to organization	5.200, p < .034	Only marginal differences
Team members regard team accomplishments above average	Nonsignificant effect	
Team feels team performed acceptably	Nonsignificant effect	
Team members said that objectives were met efficiently	5.960, p < .025	Only marginal differences
Overall Team Performance (Composite of previous nine measures)	6.885, p < .018	4 vs.6
Stage of Team Development	6.600, p < .020	Only marginal differences
Mutual Trust shown	6.800, p < .019	Only marginal differences
Mutual Concern shown	6.800, p < .019	Only marginal differences
Mutual Support shown	4.400, p < .050	Only marginal differences
Positive Emotional status of members shown	4.400, p < .050	Only marginal differences
Mutual Respect shown	4.400, p < .050	Only marginal differences
Mutual celebration shown	5.800, p < .027	Only marginal differences

Emergent Leaders: EOA Class 98-2

Each of the learning team facilitators independently selected emergent leaders from their small groups. These emergent leaders' (N=19) personality profiles were averaged and resulted in a summary profile of indigeneous leaders in diverse groups. Using a criterion of one-half standard deviation (T= + - 5) from published norms it was found that these leaders were higher than the general population in Openness to Experience (M = 58; SD = 11) and Conscientiousness (M = 55, SD = 12) and lower on Agreeableness (M = 45, SD=9). This sample was average on Negative Emotions (M = 51, SD = 11) and Extraversion (M = 51, SD = 9).

These higher scores on Openness to Experience derive from higher than average scores on the facets of Fantasy (M = 57, SD = 11), Aesthetics (M = 55, SD = 12), Feelings (M=55, SD = 12), Actions (M = 55, SD = 11), and Ideas (M = 55, SD = 10). Higher scores on Conscientiousness derive largely from the facet of Achievement Striving (M = 57, SD = 10). Lower Agreeableness scores derived from the lower scores on Trust (M = 44, SD = 12) and Altruism (M = 44, SD = 9).

Discussion

Similar to Braun et al. (1994), who profiled Navy SEALs, and Callister et al. (1997) who profiled Air Force student pilots, a general mean personality profile of DEOMI trainees emerges from the FFM. Generally, the group of DEOMI EOA Class 98-2 trainees can be described in the following manner:

> *Emotional expressiveness and reactivity is within normal ranges. Although they tend to be calm and free from tension under most circumstances, situational stress may precipitate negative affect and occasional anger. However, they are essentially stable and not prone to internal distress or outward hostility. Their orientation to others is affable but they are also capable of working alone, and they move easily between group and solitary activities. When working with others, they are able to be cooperative or competitive as the situation demands, and they are neither excessively dependent upon or independent from surrounding individuals. They are not easily distracted by others nor are they overly stimulated by their environment. That is, they do not exhibit a strong preference for exciting activities or novel experiences. Their range of interests is moderate and they appreciate new ideas; however, they tend to be fairly practical and down to earth in their interests. When there is a task to be accomplished, they tend to be achievement-oriented, disciplined, and responsible. Their strong needs for order and structure serve them well in task completion.*

It is important to bear in mind that this is a general group description and may not apply to any single individual within the group. However, similar individualized descriptions can be composed based upon a person's responses on the NEO-PI-R.

The finding of greater Openness to Experience and Agreeableness for women relative to men is consistent with the literature and holds implications for practical use of the FFM. Along similar lines, the finding that lower ranks demonstrate higher levels of Neuroticism (N) than higher ranks is also important when using the FFM in military samples. Essentially, localized norms may need to be developed for DEOMI that take into account these differences. As the NEO-PI-R continues to be administered to DEOMI trainees, scrutiny of potential gender differences should continue. Additionally, although the present sample did not exhibit racial differences in personality, future classes may exhibit differences, and statistical analyses should be performed prior to any practical use of the NEO-PI-R for purposes such as selection or training.

The statistically greater levels of Openness to Experience and Agreeableness for women found in EOA Class 98-2 is attributable to the fact they were compared to the men in this sample. Hence, these findings must be interpreted with care. Both women and men scored within the average range; however, they were significantly different from each other with the men scoring

slightly lower and women slightly higher on these two factors. Thus, this finding may have implications for small group processes but little application to performances in the external environment.

Within the small groups, the higher levels of Openness to Experience and Agreeableness in women may be manifest in greater appreciation for novel ideas and experiences and receptivity to acting on this appreciation. For them, "tested and true" ideas may be questioned and they may be more willing to act on new ideas. However, the women are also more cooperative and open to the opinions of others than the men in this sample, who may be more competitive with and skeptical of others. These differences can create desired diversity, but can also contribute to tension within the group.

With respect to rank, it is important to note that some occupational characteristics are "stronger" than others. When an occupation has a strong demand for prescribed job-relevant behaviors, the effects of personality are often not as pronounced as when an occupation leaves more room for personality to affect performance (Hogan & Hogan, 1995). One such example of this may lie in the variable of rank. Higher ranks may involve occupations with implicit and explicit expectations for non-reactivity and emotional stability (low N) that serve to moderate any existing levels of N. An alternative explanation may be that high ranks demonstrate lower scores on N simply because they are experiencing less anxiety, hostility, depression, and vulnerability when compared to those of a lower, and perhaps more insecure, rank. When used with military samples, interpretation of FFM scores must be made within contextual variables such as type of sample and structural variables such as rank.

The finding of lower levels of N with higher rank may also indicate the effects of lower rank. Within this data set, average scores for both low and high rank are very close to the standardized mean of 50. However, between group comparisons of relative standing indicate statistical differences between low and high ranks. Indeed, on the N facets of Angry Hostility and Vulnerability, lower ranked individuals are close to one standard deviation above their higher ranked counterparts. Hence, although levels of N are within normal limits for both groups and are likely not of clinical significance, they are suggestive that individuals at the lower end of the rank spectrum are experiencing greater internal dissatisfaction than those at the higher end of the spectrum. Of course, further research would be necessary to clarify the reasons for these differences between low and high ranks.

Some interesting findings were also discovered with regard to teamwork processes and the six small groups (learning teams). In fact, this is the first study the authors are aware of that treats small training groups of this sort as learning teams. It appears that this is a worthy addition to the training of these military teams. It presents the trainees with the challenge to perform as team members with shared goals and commitment to learning as a team. Team processes were different across the different teams, which also may add insight to the ways that learning teams might be treated in the context of equal opportunity training. The authors believe that future work by the training development directorate within DEOMI, as well as in other training environments employing similar models of training, would do well to examine the value of teamwork processes.

At this stage, it is not clear what the linkage is between personality and team processes. This is due to a number of factors. First, it is not a simple matter to summarize the personality of a team. In other words, is it appropriate to compute a mean profile of the five factors and label this the personality of the team? Or is it better to consider the variance of the team members on each personality dimension? A third and very cogent option is to summarize the net effect of the personalities of the team members on some type of summary index that indicates the outcome of the interaction of team members with their individual personality profiles. The authors have not discovered an adequate summary technique to date, but predict that pursuing one would help in applying personality theory to team management, team development, and team leadership.

The results regarding emergent leaders suggest that these individuals are accepting of new ideas and novel experiences. They also readily act on new suggestions and are probably creative problem-solvers. They tend to have a strong appreciation for art and beauty, and are sensitive to the feelings of others. At the same time, they may be discreet and cautious in their approach to others, and circumspect in their interpersonal interactions. This may generate, in part, from a focus on tasks and the need to achieve. It is important to note this description emanates from team leader ratings; however, there was extensive agreement among individual raters regarding emergent leaders. Further research is needed to describe emergent leaders as well as the interaction between team leaders, emergent leaders, and team/group process measures.

General Discussion

The goal of this paper was to examine diversity from a broad (employing a personality basis) rather than narrow perspective as it pertains to teams and their leadership within the DoD. The authors have taken the opportunity to examine how this broad perspective on diversity might affect a unique type of "team" within DoD, the small group within which EOAs are trained at DEOMI. Necessarily, the ground covered was varied. And so the paper may appear more disparate in its parts than the authors or the readers would like. Therefore, it seems useful to make some final observations and integrate theoretical and applied concepts in concluding statements.

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There is Nothing so Practical as a Definition

This paper was grounded in definitions of the constructs examined. Definitions of diversity, teams, and team leadership were explored. In this part of the "journey," the authors of

the current study considered current perspectives with an eye toward creating new perspectives. This is particularly the case in the area of diversity and how it is defined in the context of teams. Following the lead of researchers such as McGrath and his colleagues, the authors challenged the concepts that diversity is always to be valued within a team. Research of course exists to support this notion. Yet, there is a danger that the valuing diversity slogan is employed without truly understanding the ramifications of such a slogan. If teams are at the heart of operations within many organizations—particularly DoD—then it would seem naive to be comfortable with a slogan that diversity is always to be valued. We need to move beyond slogans into a more sophisticated understanding of the impact of diversity. This line of thinking is embodied within the Fourth Valuing Diversity Paradigm that the authors offer as a future model of management. In this paradigm, we consider individual differences—in particular, but not exclusively, personality differences—as the basis of an expanded valuing diversity effort. While human characteristics are to be valued because they are, after all, a part of the workforce employed within DoD, it is suggested that some personality characteristics may contribute to team effectiveness (in the broadest sense of the term), some may not related to team effectiveness, and some may detract from effectiveness.

There is an old saying that there is nothing more practical than a good theory. The authors propose that there is nothing more practical than a clear and widely understood **definition** of the constructs that an organization is focusing on. Diversity is one such construct. Team is another. Leadership is another. It is important to keep a collective eye on what is meant by these terms.

The Role of Team Leadership and Shifting Paradigms

Even if the organization keeps "its eye on the ball" and clearly defines its objectives, how does it meet them? In particular, how might DoD evolve to new and improved "paradigms" or "management models" for diversity? The authors propose that because of the importance of teams within DoD (and this may apply to organizations outside DoD, for teams are becoming increasingly important there as well) that team leadership may be the important tool for implementing change. Leadership of teams has critical and essential impact on the outcome of teams. Therefore, team leaders are involved in the fabric of the performance of an organization. How better to disseminate an evolving model of managing diversity than through the team leadership "network"? Though a commonly designed team leader training program, covering the fundamental aspects and components of team processes, diversity initiatives can be implemented at a deep rather than simplistic level. In particular, the personality perspective on diversity can well be embraced and disseminated through a training program in which team leaders acquire a master of the basics of the FFM and its importance in group and team processes. This approach has great potential for better management of team performance and for establishing a foundation for valuing diversity in the most profound sense of the term.

Equal Opportunity Advisor Training and the FFM

The FFM was examined in the context of EOA training, and it is believed the FFM can be used fruitfully in a variety of ways within DEOMI. For example, the FFM can become the basis for an expanded definition (or paradigm as the case may be) of diversity. The curriculum within

DEOMI can be modified to provide EOA students with a mastery of the basics of the FFM and appreciation for the role of personality in human interactions. The years of research supporting the FFM as a psychometrically valid measurement instrument can serve as a solid foundation for training future EOAs. It should be noted that DEOMI staff has already begun to train DEOMI students in the FFM, particularly as the factors pertain to them individually. This kind of training might be further developed to provide graduates of DEOMI with sufficient competence to apply the model in their work activities and training.

There is also an opportunity to use the FFM to help current DEOMI trainers in their small group work. DEOMI's training philosophy explicitly values the self-knowledge and awareness promoted by an individual's understanding of their own personality and how it influences individual behavior and emotions. This process of self-awareness is facilitated by the FFM and the information gained from measurement and description of the factors of personality. Further, trainers can benefit from knowledge regarding the role of personality in leadership and small group behaviors. For example, rather than confronting a group member about consistent silence within the group, a trainer could use the knowledge of introversion and its influence on interactional processes to facilitate greater participation of the group member. Conversely, group members (trainees) can view their silence as a product of personality, which is a value-free construct that may enable them to focus on strategies for behavioral change, if so desired. Operating within a FFM framework can thus provide a common communication system and opportunity for self-awareness within a value-free (and less stigmatized) individual difference model.

<u>Warning: Life Beyond the FFM</u>

In our endorsement of the FFM as a way of supplementing the concept of diversity, a cautionary note must be added. Although personality theory does provide a useful addition to current conceptions of diversity management, it is not complete. Values and attitudes may not be fully captured by the FFM. Yet, values and attitudes are very much a part of an individual team member's makeup and team behavior. Furthermore, although the NEO-PI-R is a well-designed and validated instrument, it is not perfect. For DoD or any organization to use such an instrument without recognizing that it is not free from some random measurement error would be a mistake. Further, as the analyses of the EOA Class of 98-2 indicate, local norms are likely more important than standard published norms, and there may be within-group differences between categorical variables such as gender or rank. Finally, there is a danger that the FFM might become something akin to a "religion." The authors warn against this much as we would warn against reifying any other model of individual differences. The FFM has its uses and they are strong. It has its limitations as well.

Recommendations for Research

There are many practical questions that require research-based answers. Some are identified below:

1. Is there a personality profile of an ideal team leader? Might this profile change as a function of the type of team and the mix of personalities comprising the team?

2. Alternatively, are we facing a situation of equifinality when it comes to the personality of a team or a team leader? That is to say, may individuals with many different profiles perform the team leadership task equally well?

3. Might it be fruitful to examine the personality "types" who **cannot** perform effectively in a DoD team or as a team leader? The team process model by Dickinson and McIntyre (1997) may serve as a basis for hypothesizing both those who can and who cannot perform effectively within a team.

4. What are the repercussions of examining the values, attitudes, and personality attributes of individuals in place of or in addition to their sociodemographic characteristics?

5. Is there an ideal profile suited to the job of EOA and EOA instructor? Are there certain profiles that should be avoided?

6. Are the facets comprising the five factors a more fruitful source of information for answering the profile-related questions above? If so, should the reliability of these facets be a matter of psychometric attention?

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Conclusion

At the outset, it was argued that leading diverse teams within DoD is an issue worthy of exploration. A discussion explored it by a process of defining what the terms diversity, teams, and team leadership mean. Different models that have been used to implement diversity management programs were explored. We also reported how personality theory has been used within DoD as an important job-relevant individual difference variable worthy of investigation as a predictor of performance. Finally, we discussed how the FFM might serve as a way of understanding and managing diversity within a rather unique group within DoD- -the DEOMI training program. In the course of the investigation and discussion, a list of suggestions for new ways of thinking about diversity and important questions for future research were offered. The current study presented a tool for spreading evolving management philosophies throughout the DoD—leadership training. Ultimately, the study has provided a watercolor landscape encompassing a variety of important issues that we hope will encourage future researchers and future practitioners to move forward.

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Appendix 1

Teamwork Process Measures

TEAMWORK **Group Number _____**

Please use the scale below to rate your team. Consider carefully the aspects of teamwork (e.g., **TEAM ORIENTATION**) and their behaviors (e.g., cooperate fully with one another). Rate how frequently your team members engage in each of the behaviors.

5 = Always
4 = Most of the time
3 = Often
2 = Sometimes
1 = Never

TEAM ORIENTATION refers to the attitudes that team members have toward one another and the team task. It reflects acceptance of team norms, level of group cohesiveness, and importance of team membership.

Team members:

____ 1. Willingly participate in all relevant aspects of the team.

____ 2. Cooperate fully with one another.

____ 3. Pull together and place team goals ahead of their personal goals and interests.

____ 4. Display a high degree of pride in their duties and the team.

____ 5. Display an awareness that they are part of a team and that teamwork is important.

____ 6. Assign high priority to team goals.

____ 7. Feel that team experience is personally satisfying.

____ 8. Feel proud of personal contributions to team output.

____ 9. Regard other team members in a positive way.

____10. Feel close to other team members.

____11. Do helpful things for other members of the team.

____12. Unify with other members in pursuit of team goals.

____ 13. Feel that accomplishment of team goals is important.

TEAM LEADERSHIP involves providing direction, structure, and support for other team members. It does not necessarily refer to a single individual with formal authority over others. Team leadership can be shown by several team members.

Team members:

____ 1. Encourage other team members to make decisions on their own.

____ 2. Work with other members to develop communication methods and areas of responsibility.

____ 3. Explain to other team members exactly what is needed from them for a project.

____ 4. Review the situation quickly when the team becomes overwhelmed and take action.

____ 5. Ensure that other members are working up to capacity.

____ 6. Ask other members to follow standard procedures.

____ 7. Stress the importance of meeting deadlines.

____ 8. Strive to maintain definite performance standards.

____ 9. Give consideration to the needs of other members, especially subordinates.

____10. Provide encouragement when other members attempt to meet new challenges.

____11. Are willing to listen to problems/complaints of other members.

____12. Show concern for the welfare of other team members, especially subordinates.

____13. Strive to create a friendly team environment.

____14. Provide needed support for new members.

____15. Listen to the concerns of other team members.

____16. Assign experienced members to perform critical tasks.

____17. Assign extra work only to the more capable members.

____18. Find someone to fill in for them when leaving work.

COMMUNICATION involves the exchange of information between two or more team members in the prescribed manner and by using proper terminology. Often the purpose of communication is to clarify or acknowledge the receipt of information.

Team members:

____ 1. Clarify intentions to other team members.

____ 2. Clarify procedures in advance of assignments.

____ 3. Pass on complete information to other members.

____ 4. Acknowledge and repeat messages to ensure understanding.

____ 5. Communicate with proper terminology and procedures.

____ 6. Verify information prior to reporting to others.

____ 7. Ask for clarification of performance status when necessary.

____ 8. Follow proper communication procedures in passing and receiving information.

____ 9. Ensure that other team members understand information as it was intended to be understood.

____10. Communicate information related to the team task.

____11. Discuss task-related problems with others.

MONITORING refers to observing the activities and performance of other team members. It implies that team members are individually competent and that they may subsequently provide feedback and backup behavior.

Team members:

____ 1. Are aware of other team members' performance.

____ 2. Are concerned with the performance of team members with whom they interact closely.

____ 3. Make sure other team members are performing appropriately.

____ 4. Recognize when a team member makes a mistake.

____ 5. Recognize when a team member performs correctly.

____ 6. Notice the behavior of others.

____ 7. Discover errors in the performance of another team member.

____ 8. Watch other team members to ensure that they are performing according to guidelines.

____ 9. Notice which members are performing their tasks especially well.

FEEDBACK involves the giving, seeking, and receiving of information among team members. Giving feedback refers to providing information regarding other members' performance. Seeking feedback refers to requesting input or guidance regarding performance. Receiving feedback refers to accepting positive and negative information regarding performance.

Team members:

____ 1. Respond to other members' requests for performance information.

____ 2. Accept time-saving suggestions offered by other team members.

____ 3. Explain terminology to a member who does not understand its meaning.

____ 4. Ask the supervisor for input regarding their performance and what needs to be worked on.

____ 5. Are corrected on a few mistakes, and incorporate the suggestions into their procedures.

____ 6. Use information provided by other members to improve behavior.

____ 7. Ask for advice on proper procedures.

____ 8. Provide helpful suggestions to other members.

____ 9. Provide insightful comments when an assignment does not go as planned.

BACKUP BEHAVIOR involves assisting the performance of other team members. This implies that members have an understanding of other members' tasks. It also implies that team members are willing and able to provide and seek assistance when needed.

Team members:

____ 1. Fill in for another member who is unable to perform a task.

____ 2. Seek opportunities to aid other team members.

____ 3. Help another member correct a mistake.

____ 4. Provide assistance to those who need it when specifically asked.

____ 5. Step in for another team member who is overburdened.

____ 6. Take control of a situation when other team members do not know how to perform.

____ 7. Solve a problem posed by another team member.

____ 8. Ask for help when needed.

____ 9. Maintain their own duties in the process of helping others.

COORDINATION refers to team members executing their activities in a timely and integrated manner. It implies that the performance of some team members influences the performance of other team members. This may involve an exchange of information that subsequently influences another member's performance.

Team members:

____ 1. Complete individual tasks without error, in a timely manner.

____ 2. Pass performance-relevant data from one to another in a timely and efficient manner.

____ 3. Are familiar with the relevant parts of other members' jobs.

____ 4. Facilitate the performance of each other.

____ 5. Carry out individual tasks in synchrony.

____ 6. Cause other members to work effectively.

____ 7. Avoid distractions during critical assignments.

____ 8. Carry out individual tasks effectively thereby leading to coordinated team performance.

____ 9. Work together with other members to accomplish team goals.

PERFORMANCE concerns the accomplishment of the activities and tasks required of the team. This team performance occurs with a consideration of the goals and expectations of team members, the supervisor, and the larger organization.

Team members:

____ 1. Accomplish team goals.

____ 2. Meet or exceed expectations of the team.

____ 3. Meet performance goals in a timely manner.

____ 4. Regard team output as adequate or acceptable.

____ 5. Achieve team goals with few or no errors.

____ 6. Produce team output that meets standards of the organization.

____ 7. Regard accomplishments of the team to be above average.

____ 8. Feel that the team as a whole performed at an acceptable level.

____ 9. Met team objectives in an efficient manner.

Your Group Number _____

1. Please list the top three group leaders in your small group that emerged throughout the term.

   a.
   b.
   c.

2. Judging your small group as a whole, did it get "stuck" in one of the following stages? Thinking over the majority of your small group sessions, please circle the stage your group remained in.

   a. Forming

b. Storming
c. Norming
d. Performing

3. Did your small group progress successfully through the Performing stage?

a. Yes
b. No

4. Please rate your small group on the amount of the following.

a.	Mutual trust	Low	Medium	High
b.	Mutual concern	Low	Medium	High
c.	Mutual support	Low	Medium	High
d.	Positive emotional status of members	Low	Medium	High
e.	Mutual respect	Low	Medium	High
f.	Mutual celebration	Low	Medium	High